WHAT IS CLAIMED IS:

1. An aberration detection device comprising:

a radiation source for emitting a light beam;

an object lens for focussing the light beam on an information carrier;

a light beam splitter for separating a returning light beam that has been reflected by the information carrier and passed through said object lens from an incoming light beam;

a light deflector for partitioning and deflecting the returning light beam, that has been separated by said light beam splitter, into a light beam passing a first region and a light beam passing a second region; and

a plurality of light detectors for receiving a deflected light beam passing through the first region;

wherein an aberration is detected by comparing signals from said plurality of light detectors.

2. An aberration detection device comprising:

a radiation source for emitting a light beam;

an object lens for focussing the light beam on an information carrier;

a light deflector for partitioning a returning light beam that has been reflected by the information carrier and passed through said object lens into a light beam passing a first region and a light beam passing a second region, and deflecting the light beam passing the first region away from said radiation source; and

a plurality of light detectors for receiving a deflected light beam passing through the first region;

wherein an aberration is detected by comparing signals from said plurality of light detectors.

3. The aberration detection device according to Claim 1 or 2, wherein said light deflector is a hologram for partitioning and diffracting a light beam into a plurality of light beams.

4. The aberration detection device according to Claim 1 or 2, wherein said plurality of light detectors comprises a photo–detector partitioned into at least two portions, and the light beam passing the first region is irradiated

onto a partition line of the at least two portions.

5. The aberration detection device according to Claim 1 or 2, wherein the first region is a substantially central portion of one of two regions that are attained by partitioning a region passed by the returning light beam with a plane including an optical axis of the returning light beam into two regions.

6. The aberration detection device according to Claim 1 or 2, wherein the first region is substantially equal to one of the two regions that are attained by partitioning, with a plane including an optical axis of the returning light beam, a region that is bounded by two concentric circles of different radii whose center is an optical axis of the returning light beam.

7. The aberration detection device according to Claim 1 or 2, wherein said light deflector is a blazed hologram.

8. The aberration detection device according to Claim 2, wherein said plurality of light detectors is arranged symmetrically with regard to said radiation source and near said radiation source.

9. The aberration detection device according to Claim 2, wherein said light deflector comprises a hologram for diffracting light of a predetermined polarization and a $\lambda/4$ plate,

said hologram does not diffract an incoming light beam emitted by said radiation source and travelling toward the information carrier,

said hologram partitions the returning light beam into a plurality of light beams and diffracts the plurality of light beams into different directions.

10. An optical information recording and reproducing apparatus for (i) recording information onto a recordable and reproducible information carrier having a plurality of information recording layers, and an optical separation layer sandwiched between the information recording layers and/or (ii) reproducing the recorded information; said optical information recording and reproducing apparatus comprising:

a radiation source for emitting a light beam;

a light beam focussing system for focussing a light beam emitted by said radiation source onto at least one of the plurality of information recording layers; and

a spherical aberration correction system formed in one piece with said light beam focussing system.

11. The optical information recording and reproducing apparatus according to Claim 10, wherein said light beam focussing system comprises two groups of convex lenses, and said spherical aberration correction system changes the distance between said two groups of convex lenses.

12. The optical information recording and reproducing apparatus according to Claim 10, wherein said light beam focussing system comprises two aspherical lenses, and said spherical aberration correction system changes the distance between said two aspherical lenses.

13. The optical information recording and reproducing apparatus according to Claim 10, wherein said light beam focussing system comprises an aspherical lens and a spherical lens, and said spherical aberration correction system changes the distance between said aspherical lens and said spherical lens.

14. An optical information recording and reproducing apparatus for (i) recording information onto a recordable and reproducible information carrier having a plurality of information recording layers, and an optical separation layer sandwiched by the information recording layers and/or (ii) reproducing the recorded information; said optical information recording and reproducing apparatus comprising:

a radiation source for emitting a light beam;

a light beam focussing system for focussing a light beam emitted by said radiation source onto at least one of the plurality of information recording layers; and

a spherical aberration correction system formed in one piece with said light beam focussing system and arranged between said radiation source and said light beam focussing system,

wherein said spherical aberration correction system can change an optical phase that is constant in a circumferential direction, and varies in a

radial direction, with respect to an optical axis of said light beam focussing system.